CLAIMS

1. A wind turbine comprising a stationary part including a tower (1) extending substantially vertically, a nacelle (2) comprising a wind rotor having at least one blade arranged on a main shaft having a substantially horizontal rotation axis and a power transmission system, a yawing system comprising a stationary part being fixed to an upper end of the tower (1) and a movable part being fixed to the nacelle (2), the stationary part and the movable part being designed so that the nacelle (2) is being supported vertically and horizontally by the tower (1) and may pivot relatively to the tower (1) about a substantially vertical yawing axis (A), and

a plurality of elongated members such as bendable electrical power cables (9) for transferring electrical power from the generator system, the plurality of elongated members such as the power cables (9) being fastened at an upper end to the nacelle (2) and at a lower end to the stationary part of the wind turbine, and a passage (4) being defined between the nacelle (2) and the tower (1) and being positioned so that the vertical yawing axis (A) passes through the passage (4), the plurality of elongated members such as the electrical power cables (9) passing through the opening, said wind turbine further comprising at least

a first suspension (5) being suspended by the nacelle (2), the first suspension defining substantially vertically extending supporting surfaces (15), the outer surface of each of said elongated member such as the electrical power cables (9) for a longitudinal length of at least four times the mean outer diameter (d1, d2) of the item being in abutting contact with and squeezed between at least two of each supporting surfaces (15) so that a substantial part of the weight of the member is supported by the first suspension (5).

2. The wind turbine according to claim 1, wherein the first suspension (5) is arranged at an upper part of the tower (1) in the passage (4) between the tower (1) and the nacelle (2).

3. The suspension to be used in wind turbine according to claim 1, wherein the supporting surfaces (15) of the first suspension (5) are formed from a resilient material.

4. The suspension according to claim 3, wherein said resilient material is plastic.

5. A wind turbine comprising a stationary part including a tower (1) extending substantially vertically, a nacelle (2) comprising a wind rotor having at least one blade arranged on a main shaft having a substantially horizontal rotation axis and a power transmission system, a yawing system comprising a stationary part being fixed to an upper end of the tower (1) and a movable part being fixed to the nacelle (2), the stationary part and the movable part being designed so that the nacelle (2) is being supported vertically and horizontally by the tower (1) and may pivot relatively to the tower about a substantially vertical yawing axis (A), and

a plurality of elongated members such as bendable electrical power cables (9) for transferring electrical power from the generator system, the plurality of elongated members such as the power cables (9) being fastened at an upper end to the nacelle (2) and at a lower end to the stationary part of the wind turbine, and a passage (4) being defined between the nacelle (2) and the tower (1) and being positioned so that the vertical yawing axis (A) passes through the passage (4), the plurality of elongated members such as the electrical power cables (9) passing through the passage (4), said wind turbine further comprising at least

a first suspension (5) being suspended by the nacelle (2), the first suspension defining substantially vertically extending supporting surfaces(15), the outer surface of each of said elongated members such as electrical power cables (9) for a longitudinal length of between one and two times the mean outer diameter (d1, d2) of the member being in abutting contact with and squeezed between at least two of each supporting surfaces (15) so that a substantial part of the weight of the member is supported by the first suspension (5), and where the vertically extending supporting surfaces are provided with beads (112, 120), and,

where the wind turbine comprises drive means for driving the pivoting of the nacelle (2) relatively to the tower (1) and control means for controlling said drive means so that the nacelle (2) will pivot less than a predetermined number of turns relatively to a predetermined reference position of the nacelle (2) so as to prevent excessive twisting of the power cables (9), and

where each of the plurality of elongated members such as the electrical power cables (9) forms a down-hanging curve (11) and is secured to the stationary part of the wind turbine at a vertical position above the lowest part of the curve, the vertical extension of the down-hanging curve at the reference position of the nacelle being of a magnitude sufficient to ensure that the member will not be exposed to excessive

longitudinal tension due to the relative shortening of the member caused by twisting of the member during pivoting of the nacelle (2).

6. The wind turbine according to claim 5, wherein a plurality of spacing devices (37) are arranged between the elongated members such as the electrical power cables (9) with a vertical spacing between neighbouring spacing devices (5), each spacing device being arranged so as to maintain the members such as the power cables (9) in a constant position in a horizontal plane of the spacing device with a mutual spacing between the members.

7. The wind turbine according to claim 6, wherein the spacing devices (37) are suspended from a vertically extending elongated, flexible supporting means (7) of which an upper end is suspended from the nacelle (2).

8. The wind turbine according to claim 7, wherein the supporting means (7) is secured to an upper end of the first suspension (5).

9. The wind turbine according to claim 5 and comprising a second suspension (101, 113) being arranged at a lower vertical position than the first suspension (5), the second suspension defining substantially vertically extending supporting surfaces (111, 119), the outer surface of each of said members such as the electrical power cables (9) for a vertical length of at least four times the mean outer diameter of the member being in abutting contact with and squeezed between at least two of each supporting surfaces (111,119) so that a substantial part of the weight of the member is supported by the second suspension.

10. The wind turbine according to claim 9, wherein the second suspension (101, 113) is being suspended from the nacelle (2).

11. The wind turbine according to claim 9, wherein the second suspension (101, 113) is supported by a vertically extending elongated, flexible supporting means (7) such as a wire, a rope or a chain.

12. The wind turbine according to claim 11, wherein the supporting means (7) is fastened at an upper end to the first suspension (5).

13. The suspension to be used in a wind turbine according to claim 9, wherein the supporting surfaces (111,119) of the second suspension (101, 113) are formed from a resilient material.

14. The suspension according to claim 13, wherein said resilient material is plastic.

15. The wind turbine according to claim 5, further comprising a fastening device (10) for fastening the members such as the power cables (9) to the stationary part of the wind turbine, the fastening device (19) defining substantially vertically extending supporting surfaces (25), the outer surface of each of said members such as the power cables (9) being for a vertical length of at least four times the mean outer diameter of the member in abutting contact with and squeezed between at least two of each supporting surfaces (26, 29) so that a substantial part of the weight of the loop of the member is supported by the fastening device (10).

16. A suspension for attaching elongated members (9) such as cables, cords, wires or the like, said suspension comprising a first clamping portion (101) having first clamping jaws (102) and a second clamping portion (113) having second clamping jaws (114), said clamping jaws (102, 114) being intended for clamping around one of the members, and where the first clamping portion (101) and the second clamping portion (113) may be displaced inwardly towards each other and by securing means (121) may be secured around the member, the second clamping jaws (114) extend inwards into the first clamping jaws (102), that the first clamping jaws (102) extend around the second clamping jaws (114) when the two clamping portions (191,113) are assembled, that an inner surface (119) of the second clamping jaws (114) extends in extension of an inner surface (111) of the first clamping jaws (102), that an outer width (b) of the second clamping jaws (114) is smaller than an inner width (B) of the first clamping jaws (102), and that the first clamping portion (101) and the second clamping portion (113) are intended for being displaced linearly towards each other.

17. The suspension according to claim 16, wherein the inner surface (111) of the first clamping jaws (102) has a substantially semicircular shaped contour, that the inner surface (119) of the second clamping jaws (114) has a substantially semicircular shaped contour and that the inner surfaces (111, 119) of the jaws (102, 114) on the two clamping

portions (101, 113) form a through-going hole which is substantially circular when the clamping portions (101, 113) are assembled.

18. The suspension according to claim 16, characterised in that the inner surface (111) of the first clamping jaws (102) has a substantially semicircular shaped contour, and that the inner contour of the inner surfaces (111, 119) of the jaws (102, 114) on the two clamping portions (101, 113) form a through-going hole which is substantially oval when the clamping portions (101, 113) are assembled.

19. The suspension according to claim 16, wherein the extension of the first clamping jaws (102) is inwardly conical along an extension outwardly towards an opening (103) of the jaw (102) and that the extension of the second clamping jaws (114) is linear along an extension outwardly towards an opening (115) of the jaw (114).

20. The suspension according to claim 16, wherein the suspension (101, 113) comprises a first clamping portion (101) and furthermore comprises a first embodiment of a second clamping portion (113) and a second embodiment of a second clamping portion (113), and that both the first embodiment and the second embodiment of the second clamping portion (113) each are capable of co-operating with the first clamping portion (101).

21. The suspension according to claim 20, wherein the through-going hole is substantially round when the first clamping portion (101) co-operates with the first embodiment of the second clamping portion (113) and that the through-going hole is substantially oval when the first clamping portion (101) co-operates with the second embodiment of the second clamping portion (113).

22. The suspension according to claim 16, wherein the clamping portions (101, 113) are provided with ears (109, 117) extending outwardly and sideways from the clamping jaws (102, 114) in a plain substantially perpendicular to the extension of the clamping jaws (101, 114), that the ears (109) on the first clamping portion (101) is opposite the ears (117) on the second clamping portion (113) when the clamping jaws (102, 114) are assembled and that the ears (109, 117) are provided with means (110, 118) for enabling mutual securing between the ears (109, 117).

23. The suspension according to claim 16, wherein the inner surfaces (111, 119) of the clamping jaws (102, 114) are provided with beads (112, 120) and that the beads (112, 120) extend outwardly from the inner surfaces (111, 119) of the jaws (102, 114) and inwardly in the through-going hole between the jaws (102, 114) when the clamping portions (191, 113) are assembled.

24. The suspension according to claim 16, wherein the clamping portion (101) are provided with a tongue (104) extending outwardly and backwards from the jaws (102) on the clamping portion (101) in a plain substantially parallel to the extension of clamping jaws (102), and that the tongue (104) is provided with means (105) for securing of the clamping portion (101) to a holder (124) characterised in that the clamping portion (101) is provided with projections (108) extending outwardly and backwards from the jaws (102) and that the projections (108) extend in a plain immediately parallel to the tongue (104) and that the projections are intended for abutting an edge of the holder (124) when the clamping portion (101) is mounted to the holder (124).

25. The suspension according to claim 16, wherein a first clamping portion (101) and a corresponding second clamping portion (113) are mutually joined by a hinge connection and/or that partly a plurality of first clamping jaws (102) and partly a plurality of corresponding second clamping jaws (114) are mutually joined a hinge connection.

26. The first holder (124) for holding of a plurality of elongated members (9) such as cables, cords, wires or the like, said holder comprising a plurality of suspensions according to claim 24, wherein the holder (124) is provided with a plate (126) with means for co-operation with the tongue (104) on the suspensions (101), that the jaws (102) on the suspensions (101) extend outwardly from the plate (126) when the suspensions (101) are mounted to the plate (126) so that the through-going holes between the clamping jaws (102, 114) extend substantially vertical and that the plate (126) is provided with means (125) for securing of the plate (126) to a construction so that the plate extends in a horizontal plane.

27. The second holder (50) for holding of a plurality of elongated members (9) such as cables, cords, wires or the like, said holder comprising a plurality of suspensions according to claim 24, wherein the holder is provided with a plate (52) with means for co-operation with the tongue (104) on the suspensions (101), that the jaws (102) on the

suspensions (101) extend outwardly from the plate (52) when the suspensions (101) are mounted to the plate (52) so that the through-going holes between the clamping jaws (102, 114) extend substantially vertical and that the plate (52) is provided with means (51) for securing of the plate to a construction so that the plate extends in an oblique plane in relation to a horizontal plane.

28. The fourth holder constituting a means for securing a first type of said holder (124) according to claim 28, further comprising another stationary construction separate from the holder (124), wherein said fourth holder comprises a rod with a first end being attached to the plate (126) of the said first type of holder (124) and a second end being attached to the stationary construction, said first and second ends being attached by means of a linkage provided at the said first type of holder (124) and at the stationary construction and by which the rod is limited in its movement in relation to the plate and in relation to the stationary construction in such a way that the rod is movable in one vertical plane only.

29. The wind turbine according to claim 1, wherein a plurality of spacing devices (37) are arranged between the elongated members such as the electrical power cables (9) with a vertical spacing between neighbouring spacing devices (5), each spacing device being arranged so as to maintain the members such as the power cables (9) in a constant position in a horizontal plane of the spacing device with a mutual spacing between the members.

30. The wind turbine according to claim 29, wherein the spacing devices (37) are suspended from a vertically extending elongated, flexible supporting means (7) of which an upper end is suspended from the nacelle (2).

31. The wind turbine according to claim 30, wherein the supporting means (7) is secured to an upper end of the first suspension (5).

32. The wind turbine according to claim 1 and comprising a second suspension (101, 113) being arranged at a lower vertical position than the first suspension (5), the second suspension defining substantially vertically extending supporting surfaces (111, 119), the outer surface of each of said members such as the electrical power cables (9) for a vertical length of at least four times the mean outer diameter of the member being in

abutting contact with and squeezed between at least two of each supporting surfaces (111,119) so that a substantial part of the weight of the member is supported by the second suspension.

33. The wind turbine according to claim 32, wherein the second suspension (101, 113) is being suspended from the nacelle (2).

34. The wind turbine according to claim 32, wherein the second suspension (101, 113) is supported by a vertically extending elongated, flexible supporting means (7) such as a wire, a rope or a chain.

35. The wind turbine according to claim 34, wherein the supporting means (7) is fastened at an upper end to the first suspension (5).

36. The suspension to be used in a wind turbine according to claim 32, wherein the supporting surfaces (111,119) of the second suspension (101, 113) are formed from a resilient material.

37. The suspension according to claim 36, wherein said resilient material is plastic.